

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)


REPLACED BY  
ART 34 AMDT

Applicant's or agent's file reference ABC/21078/02		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/04437	International filing date (day/month/year) 06.10.2003	Priority date (day/month/year) 04.10.2002	
International Patent Classification (IPC) or both national classification and IPC F16K7/18			
Applicant PBT (IP) LIMITED et al.			

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 2 sheets.</p>	
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>	

Date of submission of the demand  06.05.2004	Date of completion of this report  06.09.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Rusanu, I  Telephone No. +49 89 2399-7280



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**International application No. **PCT/GB 03/04437****I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-8 as originally filed

**Claims, Numbers**

1-6 received on 06.05.2004 with letter of 06.05.2004

**Drawings, Sheets**

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: english , which is:

- ☒ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**International application No. **PCT/GB 03/04437**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-6
	No: Claims	
Inventive step (IS)	Yes: Claims	1-6
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-6
	No: Claims	

2. Citations and explanations

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/04437

**Re Item V****Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

Independent claim 1 relates to a valve for controlling fluid flow comprising the technical features of the preamble of this claim.

A valve of the same type is disclosed in document GB 1 498 178, considered the closest prior art. The difference to this document is that the valve further comprises a sealing member provided around the periphery of the inlet and the valve member in form of a blade has a degree of stiffness such that it provides a fuse tending to keep the blade in contact with the sealing member.

The technical problem solved is how to provide an effective seal without the need of a special material or preparation of the surface around the opening.

The combination of sealing member and closing member kept in contact with said sealing member has neither been disclosed, nor rendered obvious, by the available prior art documents.

# CLAIMS:

1. A valve for controlling fluid flow comprising a body provided with a fluid passageway having an inlet and an outlet, a valve member for inhibiting fluid flow through the passageway, and means for moving the valve member so as to provide for controlled flow of fluid from the inlet to the outlet, wherein the valve member is in the form of a blade, one end of which is mounted at a location remote from the passageway; and wherein the means of moving the valve member is arranged to act on the other end of the blade whereby to control fluid flow through the passageway.
2. A valve according to claim 1, wherein the blade is shaped so as to provide a desired stiffness as it is moved by the moving means.
3. A valve according to claim 2, wherein the blade is loosely mounted at said one end so as to provide a limited amount of movement in the direction of movement.
4. A valve according to claim 3, wherein an auxiliary member is located over the flexible blade and contacts the blade within the confines of the periphery of an inlet to the passageway.
5. A valve according to claim 3 or 4, wherein a sealing member is provided around the periphery of the inlet.